

# Application for the Construction of New and Substantially Modified Aboveground Petroleum Storage Tank (AST) Systems

New Hampshire Department of Environmental Services  
Waste Management Division  
P.O. Box 95, 29 Hazen Drive  
Concord, New Hampshire 03302-0095  
(603) 271-3644, FAX (603) 271-2181



| INSTRUCTIONS  | STATE USE ONLY   |
|---|--|
| At least 45 days prior to commencing the construction or installation of a new or replacement AST system having a capacity of more than 660 gallons, or a new or replacement underground or over-water piping system, the owner shall submit this completed application along with a complete set of plans that have been prepared and stamped by a New Hampshire licensed professional engineer to DES at the above address and to the Municipal Fire Chief. | Facility No. _____<br>Date Received _____<br>Municipal Notif. _____<br>Date Issued _____ |

| CERTIFICATION OF MUNICIPAL NOTIFICATION   |
|---|
| To meet the requirements of RSA 541-A:39, the undersigned certifies that on (date) _____, a copy of this completed application was mailed to the Fire Chief of (municipality of proposed AST facility ) _____.<br><br>Signed: _____ Date: _____<br><br>Name and distance to nearest surface water: _____<br><b>This application must include a locus identifying all water wells, surface water bodies, and source water protection areas within 500-feet of the proposed AST system(s) pursuant to Env-Wm 1402.17(b)(6).</b> |

| OWNERSHIP OF TANK(S)  | LOCATION OF TANK(S)  |
|---|--|
| _____<br>Tank Owner Name<br><br>_____<br>Mailing Address<br><br>_____<br>City                      State                      Zip Code<br><br>_____<br>Phone Number                      E-Mail Address | _____<br>Facility Name<br><br>_____<br>Street Address<br><br>_____<br>City                      State                      Zip Code<br><br>_____<br>County |

| LAND OWNER (If different than Tank Owner)   | CONTACT PERSON (In Charge of Tank(s))  |
|---|--|
| _____<br>Land Owner Name<br><br>_____<br>Mailing Address<br><br>_____<br>City                      State                      Zip Code<br><br>_____<br>Phone Number                      E-Mail Address | _____<br>Contact Name and Title<br><br>_____<br>Mailing Address<br><br>_____<br>City                      State                      Zip Code<br><br>_____<br>Phone Number                      E-Mail Address |

|   |                              |
|---|------------------------------|
| Does this facility have existing AST(s)? _____ (Yes/No) | Existing Facility No.: _____ |
|---|------------------------------|

**RETURN COMPLETED APPLICATION TO THE ADDRESS ABOVE**

**To facilitate the review process and reduce review time, please provide as much of the following information as possible, where applicable. Incomplete or missing information may be cause for rejection of submittal and/or extend review time.**

## I. FACILITY PLAN

*THE FACILITY PLAN SHALL COMPLY WITH ENV-WM 1402.17, "REQUIREMENTS FOR APPROVAL OF AST SYSTEMS AND PIPING".*

**The Facility/System Plan shall include:**

- (A) An accurate scaled diagram (22" X 34") showing a plan view of tank location(s), all piping, transfer areas, structures, appurtenances, north arrow, **a locus identifying all water wells, surface water bodies, and source water protection areas within 500 feet**, and 100 year flood plain information.
- (B) A detailed tank diagram (22" X 34") showing secondary containment, leak detection, product type, piping (indicate slope and backfill requirements if underground), transition and dispenser sumps, piping termination details, flex connectors, foundation, cradles, atmospheric and emergency vents, gauges, high level alarms, automatic fill shut off devices, spill boxes, check valves, solenoid valves, anti siphon valves, transfer pads, positive limiting barriers, marking and coating requirements, specifications, and complete engineering designs and documentation.
- (C) Description of the AST including whether it is new or used, capacity, construction, UL rating, manufacturers name and address, model number, supplier's name and address, and any other supporting documentation on equipment and materials as necessary to describe the facility.
- (D) Dated and signed New Hampshire professional engineer stamp on each page.
- (E) Site location (locus) map or USGS 7.5 minute series map.
- (F) Cut sheets of specified system appurtenances.

## II. TANK INFORMATION

*ALL TANKS SHALL COMPLY WITH ENV-WM 1402.18, "TANK STANDARDS FOR NEW AST SYSTEMS."*

|   | TANK #: | TANK #: | TANK #: | TANK #: | TANK #: |
|---|---------|---------|---------|---------|---------|
| Capacity in Gallons (nominal/actual)  |         |         |         |         |         |
| Horizontal or Vertical tank?  |         |         |         |         |         |
| <b>Is tank new or used? (If used, the tank must be certified per Env-Wm 1402.16(b))</b> |         |         |         |         |         |
| Shop-fabricated or Field-erected?   |         |         |         |         |         |
| Tank diameter   |         |         |         |         |         |
| Tank height/length  |         |         |         |         |         |
| Product to be stored  |         |         |         |         |         |
| Tank Manufacturer   |         |         |         |         |         |
| Foundation Type   |         |         |         |         |         |
| Is tank double walled?  |         |         |         |         |         |
| UL rating of tank   |         |         |         |         |         |
| Is tank in contact with the soil or concrete?   |         |         |         |         |         |
| Is tank installed in a below grade vault?   |         |         |         |         |         |

### III. PIPING INFORMATION

ALL PIPING SHALL COMPLY WITH ENV-WM 1402.19, "PIPING STANDARDS FOR NEW AST SYTEMS".

**A. ABOVE GROUND PIPING** (check as applicable)

☐ Pressurized Piping

☐ Suction Piping

Manufacturer's Name \_\_\_\_\_

Material of Construction:- \_\_\_\_\_

Manufacturer's Part Number(s): \_\_\_\_\_

Pipe Size: (if more than one size give range): \_\_\_\_\_

Pipe Schedule: \_\_\_\_\_

Method of Assembly: \_\_\_\_\_

Type of pipe support and average spacing: \_\_\_\_\_

Number of and type of valves: \_\_\_\_\_

How will tank be protected from siphoning? \_\_\_\_\_

**B. BELOW GROUND & OVER WATER PIPING** (check as applicable)

☐ Pressurized Piping

☐ Suction Piping

ALL PIPING LOCATED IN CONTACT WITH THE GROUND, BELOW GROUND, AND OVER WATER SHALL COMPLY WITH ENV-WM 1402.22, "SECONDARY CONTAINMENT FOR NEW PIPING FOR AST SYTEMS".

**1. PIPING**

|   | PRIMARY | SECONDARY |
|---|---------|-----------|
| Manufacturer's Name                               |         |           |
| Manufacturer Model Number                         |         |           |
| Material of Construction                          |         |           |
| Pipe Size: (if more than one size give range)     |         |           |
| Pipe Schedule                                     |         |           |
| How will tank be protected from siphoning?        |         |           |
| Type of pipe support and average spacing (Marina) |         |           |
| Line Leak Detector (Pressurized Piping)           |         |           |

**2. CONTAINMENT SUMP(S)**

ALL PIPING SYSTEMS WITH SECONDARY CONTAINMENT SHALL BE PITCHED TO DIRECT ANY LEAKAGE FROM PRIMARY PIPING TO A LIQUID TIGHT CONTAINMENT SUMP MONITORED FOR LEAKS PERSUANT TO ENV-WM 1402.22(c).

Manufacturer Name: \_\_\_\_\_

Manufacturer Model No. : \_\_\_\_\_

Material of Construction: \_\_\_\_\_

Sump sensor manufacturer: \_\_\_\_\_

Sump sensor part number: \_\_\_\_\_

**3. DISPENSER SUMP(S)**

DISPENSING SYSTEMS SUPPLIED BY UNDERGROUND OR OVERWATER PIPING SHALL BE EQUIPED WITH A LIQUID TIGHT CONTAINMENT SUMP MONITORED FOR LEAKS PERSUANT TO ENV-WM 1402.22(d).

Manufacturer Name: \_\_\_\_\_

Manufacturer Model No. : \_\_\_\_\_

Material of Construction: \_\_\_\_\_

Sump sensor manufacturer: \_\_\_\_\_

Sump sensor part number: \_\_\_\_\_

#### IV. CATHODIC PROTECTION

ALL TANK SHELLS AND STEEL PIPING IN CONTACT WITH SOIL SHALL BE CATHODICALLY PROTECTED PURSUANT TO ENV-WM 1402.20, "CORROSION PROTECTION FOR NEW STEEL TANKS AND PIPING"

A. Type of Cathodic Protection System (circle one):      Sacrificial Anodes      Impressed Current      Other (Describe)

\_\_\_\_\_

B. Brief Description of Cathodic Protection System (e.g. types of anodes, spacing, rectifier power, etc)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

C. Designer of Cathodic Protection System:

Name: \_\_\_\_\_ Company: \_\_\_\_\_

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Certifying Organization (NACE International, P.E., etc.): \_\_\_\_\_ Certification Number: \_\_\_\_\_

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#### V. SECONDARY CONTAINMENT

ALL TANK SYSTEMS SHALL COMPLY WITH ENV-WM 1402.21, "SECONDARY CONTAINMENT FOR NEW AST SYSTEMS"

A. Type of Secondary Containment (e.g. Portland cement concrete dike, soil berm, dike tank, double-walled tank, remote impoundment, etc.)

\_\_\_\_\_

B. Will tank be located inside a building?  
(Circle one)

YES

NO

C. What is the volume of secondary containment?  
(In gallons)

\_\_\_\_\_

D. Is secondary containment protected from rain/snowfall?      NO      YES      If so, how?  
(Circle one)

\_\_\_\_\_

E. How will accumulated stormwater be handled?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## VI. OVERFILL PROTECTION

ALL TANK SYSTEMS SHALL COMPLY WITH ENV-WM 1402.24, "OVERFILL PROTECTION"

- A. What kind of gauge(s) will be installed on the tank system(s)? NOTE: Please include a cut sheet detailing the specifications of the gauge and show the location of the proposed gauge(s) on the plan.

\_\_\_\_\_  
Manufacturer

\_\_\_\_\_  
Model Number

- B. What kind of high level alarm system(s) will be installed on the tank(s)? NOTE: Please include a cut sheet detailing the specifications of the high level alarm system and show the location of the system sensors and the audible and visible alarm enunciators.

\_\_\_\_\_  
Manufacturer

\_\_\_\_\_  
Model Number

- C. Where will the light and audible alarm be located? \_\_\_\_\_

- D. At what height from the bottom of the tank will the high level alarm be activated?

|         |         |         |         |         |
|---------|---------|---------|---------|---------|
| TANK #: | TANK #: | TANK #: | TANK #: | TANK #: |
|         |         |         |         |         |

- E. If a double walled tank, what type of automatic fill shutoff system will be used as a tertiary means for preventing an overfill (if required pursuant to Env-Wm 1402.21(h))?

\_\_\_\_\_  
Manufacturer

\_\_\_\_\_  
Model Number

- F. At what height from the bottom of the tank will the fill shut off system be activated?

|         |         |         |         |         |
|---------|---------|---------|---------|---------|
| TANK #: | TANK #: | TANK #: | TANK #: | TANK #: |
|         |         |         |         |         |

## VII. INTERSTITIAL LEAK MONITORING:

ALL DOUBLEWALLED TANK AND PIPING SYSTEMS SHALL COMPLY WITH ENV-WM 1402.25, "INTERSTITIAL LEAK MONITORING FOR NEW AST SYSTEMS".

List Location, Manufacturer, and Model Number of all Interstitial Leak Monitoring Systems

|           |               |               |
|-----------|---------------|---------------|
| LOCATION: | MANUFACTURER: | MODEL NUMBER: |
|           |               |               |
|           |               |               |
|           |               |               |
|           |               |               |
|           |               |               |
|           |               |               |

## VIII. SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLANS

PERSUANT TO ENV-WM 1402.30, THE FACILITY OWNER SHALL PREPARE AND IMPLEMENT A SPILL PREVENTION, CONTROL, AND COUNTERMEASURE (SPCC) PLAN IN ACCORDANCE WITH 40 CFR PART 112. SPCC PLANS SHALL BE CERTIFIED BY A NEW HAMPSHIRE LICENSED PROFESSIONAL ENGINEER.

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## IX. ENGINEER OF RECORD AND CONTRACTOR/INSTALLER INFORMATION

### ENGINEER OF RECORD:

NAME: \_\_\_\_\_

COMPANY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_  
\_\_\_\_\_

PHONE NUMBER: \_\_\_\_\_

E-MAIL ADDRESS: \_\_\_\_\_

NEW HAMPSHIRE PE LICENSE NUMBER: \_\_\_\_\_

### CONTRACTOR/INSTALLER:

NAME: \_\_\_\_\_

COMPANY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_  
\_\_\_\_\_

PHONE NUMBER: \_\_\_\_\_

E-MAIL ADDRESS : \_\_\_\_\_

ICC CERTIFICATION NUMBER: \_\_\_\_\_

